

| | | |
|------------------------------------|--|--|
| Firma und Anschrift | KLINGER Kempchen - 46147 Oberhausen - Im Waldteich 21 | according to DIN EN 13555 2014-07 |
| Dichtungstyp | Kammprofilichtung B9A-MF (1.4541 / MF = 0,50 mm) | |
| Dichtungsmaße e _{GO} [mm] | Ø 53 / 69 x 4,95 mm (DIN 1514-6) | |
| Bemerkung: | Bei höheren Innendrücken wurde eine höhere Anfangsflächenpressung gewählt! | |

| erforderliche Mindest-Flächenpressung Q _{min} (bei Montage), Q _{Smin} (nach Entlastung) für p = 10 bar bis 160 bar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------|---------------|---------------|---------------|---------------------------|---------------|---------------|---------------|---------------------------|---------------|---------------|---------------|---------------------------|---------------|---------------|---------------|---------------------------|---------------|---------------|---------------|---------------------------|---------------|---------------|---------------|----------------------------|---------------|---------------|---------------|----------------------------|---------------|---------------|---------------|----------------------------|----|-----|----|
| L [mg/(s·m)] | Q _{MINL} [MPa] | | | | Q _{SMINL} [MPa] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | Q _A = 20 [MPa] | | | | Q _A = 30 [MPa] | | | | Q _A = 40 [MPa] | | | | Q _A = 60 [MPa] | | | | Q _A = 80 [MPa] | | | | Q _A = 100 [MPa] | | | | Q _A = 120 [MPa] | | | | Q _A = 160 [MPa] | | | |
| | p=10 [bar] | p=16 [bar] | p=40 [bar] | p=80 [bar] | p=10 [bar] | p=16 [bar] | p=40 [bar] | p=80 [bar] | p=10 [bar] | p=16 [bar] | p=40 [bar] | p=80 [bar] | p=10 [bar] | p=16 [bar] | p=40 [bar] | p=80 [bar] | p=10 [bar] | p=16 [bar] | p=40 [bar] | p=80 [bar] | p=10 [bar] | p=16 [bar] | p=40 [bar] | p=80 [bar] | p=10 [bar] | p=16 [bar] | p=40 [bar] | p=80 [bar] | p=10 [bar] | p=16 [bar] | p=40 [bar] | p=80 [bar] | | | | |
| 10 ⁰ | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | | | | |
| 10 ⁻¹ | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | <5 | <5 | <10 | <20 | | | | |
| 10 ⁻² | 15 | 12 | 17 | 33 | <5 | <5 | <10 | <20 | 11 | <5 | <10 | <20 | <5 | <5 | <10 | 25 | <5 | <5 | <10 | 24 | <5 | <5 | <10 | 24 | <5 | <5 | <10 | 23 | <5 | <5 | <10 | 23 | <5 | <5 | <10 | 12 |
| 10 ⁻³ | 22 | 27 | 36 | 59 | | | | | 19 | 24 | | | 15 | 14 | 31 | | 14 | 9 | 17 | 57 | 13 | 6 | 11 | 36 | 13 | 20 | <10 | 30 | 13 | 20 | <10 | 30 | 12 | <5 | <10 | 26 |
| 10 ⁻⁴ | 47 | 52 | 60 | 79 | | | | | | | | | | | | | 28 | 40 | | | 21 | 25 | 33 | 78 | 19 | 68 | 25 | 63 | 19 | 68 | 25 | 63 | 17 | 11 | 14 | 33 |
| 10 ⁻⁵ | 84 | 85 | 94 | 112 | | | | | | | | | | | | | | | | | | | | 85 | | 91 | | 85 | | 91 | | 32 | 31 | 37 | 90 | |
| 10 ⁻⁶ | | | | 158 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 159 | |
| 10 ⁻⁷ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 ⁻⁸ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Relaxationsverhältnis P _{OR} bei einer Prüfstand-Steiifigkeit von C = 500 kN/mm | | | | | | | | | | | | |
|--|-----------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
| Flächenpressung | Raumtemperatur | | Temperatur 1 [100°C] | | Temperatur 2 [200°C] | | Temperatur 3 [250°C] | | Temperatur 4 [400°C] | | Temperatur 5 [500°C] | |
| | P _{OR} | Δe _{Gc} [mm] | P _{OR} | Δe _{Gc} [mm] | P _{OR} | Δe _{Gc} [mm] | P _{OR} | Δe _{Gc} [mm] | P _{OR} | Δe _{Gc} [mm] | P _{OR} | Δe _{Gc} [mm] |
| Flächenpressung 1 [50 MPa] | 0,99 | 0,002 | 0,90 | 0,015 | 0,79 | 0,032 | 0,69 | 0,048 | | | | |
| Flächenpressung 2 [90 MPa] | 0,99 | 0,003 | 0,95 | 0,015 | 0,86 | 0,040 | 0,75 | 0,070 | | | | |
| Flächenpressung 3 [120 MPa] | | | | | | | | | | | | |
| Flächenpressung 4 [180 MPa] | 0,99 | 0,030 | 0,88 | 0,066 | 0,85 | 0,083 | 0,82 | 0,102 | | | | |

| maximale Flächenpressung ohne Beschädigung Q _{Smax} | | | | | | | | | | | | |
|--|------|-------|------|-------|------|-------|------|-------|--|--|--|--|
| PQR bei Q _{Smax} | 0,99 | 0,015 | 0,97 | 0,052 | 0,94 | 0,096 | 0,94 | 0,096 | | | | |
| Q _{Smax} [MPa] | 480 | | 480 | | 480 | | 480 | | | | | |

| Sekantenmodul der Dichtung bei Entlastung E _G und Dichtungshöhe e _G | | | | | | | | | | | | |
|---|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| Flächenpressung [MPa] | Raumtemperatur | | Temperatur 1 [100°C] | | Temperatur 2 [200°C] | | Temperatur 3 [250°C] | | Temperatur 4 [400°C] | | Temperatur 5 [500°C] | |
| | E _G [MPa] | e _G [mm] | E _G [MPa] | e _G [mm] | E _G [MPa] | e _G [mm] | E _G [MPa] | e _G [mm] | E _G [MPa] | e _G [mm] | E _G [MPa] | e _G [mm] |
| 0 | | 4,9500 | | 4,9500 | | 4,9500 | | 4,9500 | | | | |
| 1 | | 4,7295 | | 4,7260 | | 4,7665 | | 4,7380 | | | | |
| 20 | 2894 | 4,3182 | 2632 | 4,3095 | 3287 | 4,3632 | 2827 | 4,2922 | | | | |
| 30 | 4056 | 4,2455 | 4002 | 4,2773 | 4931 | 4,3315 | 5795 | 4,2555 | | | | |
| 40 | 6950 | 4,2116 | 5201 | 4,2488 | 4824 | 4,3106 | 5534 | 4,2299 | | | | |
| 50 | 6576 | 4,1930 | 9241 | 4,2269 | 5800 | 4,2877 | 7804 | 4,2077 | | | | |
| 60 | 9451 | 4,1758 | 8184 | 4,2154 | 7230 | 4,2670 | 8102 | 4,1962 | | | | |
| 80 | 7920 | 4,1517 | 8903 | 4,1909 | 9625 | 4,2343 | 10120 | 4,1722 | | | | |
| 100 | 10639 | 4,1320 | 8589 | 4,1730 | 10096 | 4,1869 | 10466 | 4,1509 | | | | |
| 120 | 11530 | 4,1137 | 11199 | 4,1526 | 12107 | 4,1218 | 10114 | 4,1214 | | | | |
| 140 | 13355 | 4,0998 | 11486 | 4,1327 | 12372 | 4,0808 | 14001 | 4,0830 | | | | |
| 160 | 13026 | 4,0853 | 12972 | 4,1016 | 13095 | 4,0399 | 14863 | 4,0481 | | | | |
| 180 | 15907 | 4,0667 | 12575 | 4,0687 | 14016 | 4,0052 | 12424 | 4,0098 | | | | |
| 200 | 18544 | 4,0440 | 15636 | 4,0267 | 14036 | 3,9759 | 15866 | 3,9651 | | | | |
| 300 | 18454 | 3,9115 | 19422 | 3,8396 | 18433 | 3,7846 | 17007 | 3,8093 | | | | |
| 400 | 19876 | 3,7783 | 18224 | 3,7031 | 18896 | 3,5553 | 20446 | 3,6436 | | | | |
| 480 | 23487 | 3,6792 | 20585 | 3,5542 | 23570 | 3,3613 | 22268 | 3,4868 | | | | |

Hinweis: Der Inhalt von grau gefärbten Zellen wurde nicht ermittelt bzw. ist nicht nötig